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(54) **BUMPER GUARD**

(76) Inventor: **James L. MacEachern**, St Catherines (CA)

Correspondence Address:
James L. MacEachern
25 LinField Drive, Unit 28
St. Catherines L2N 5T8 (CA)

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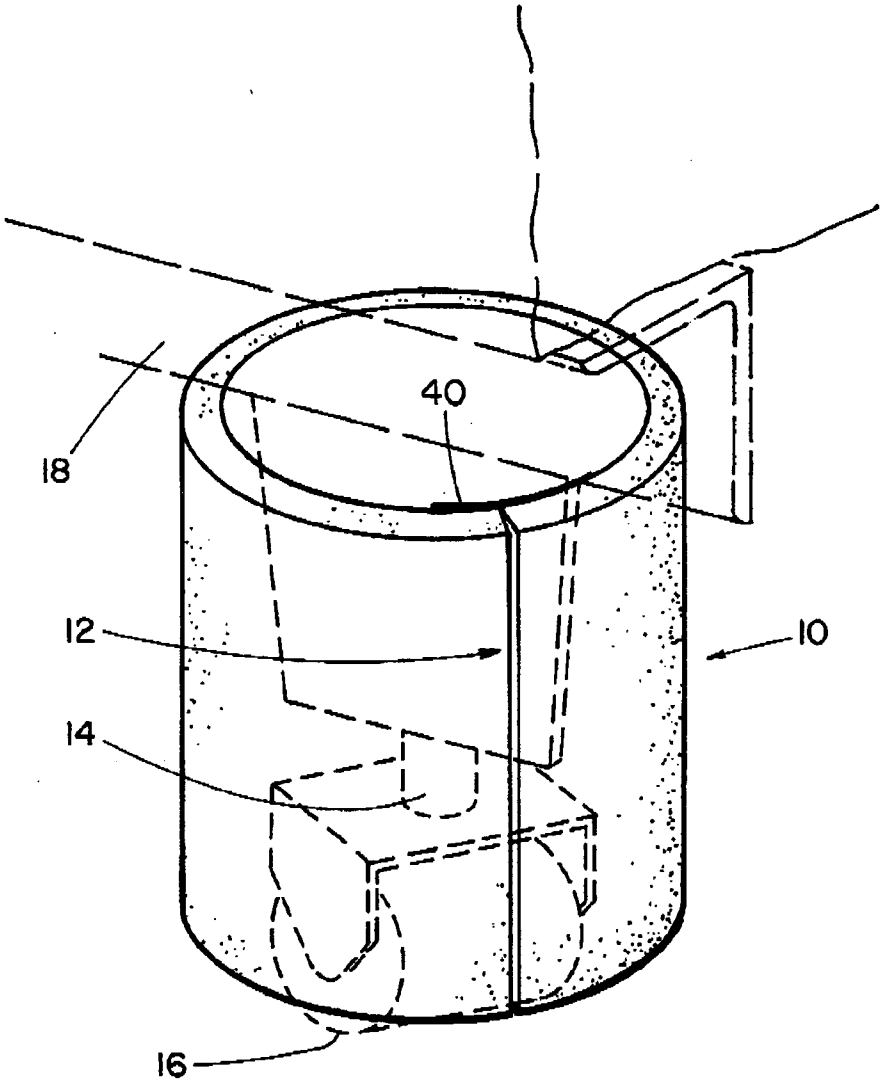
(57) **ABSTRACT**

A bumper guard for an obstruction such as furniture legs, which is removable, flexible and of resilient construction having a rectangular or quadrilateral pad, with inner and outer layers of fabric and a resilient core in between affixed together and having fastenings on the inner sides of the pad at each end of the pad by which the two ends may be fastened together around an obstruction. A sleeve may be attached to the exterior of the pad to provide a decorative appearance.



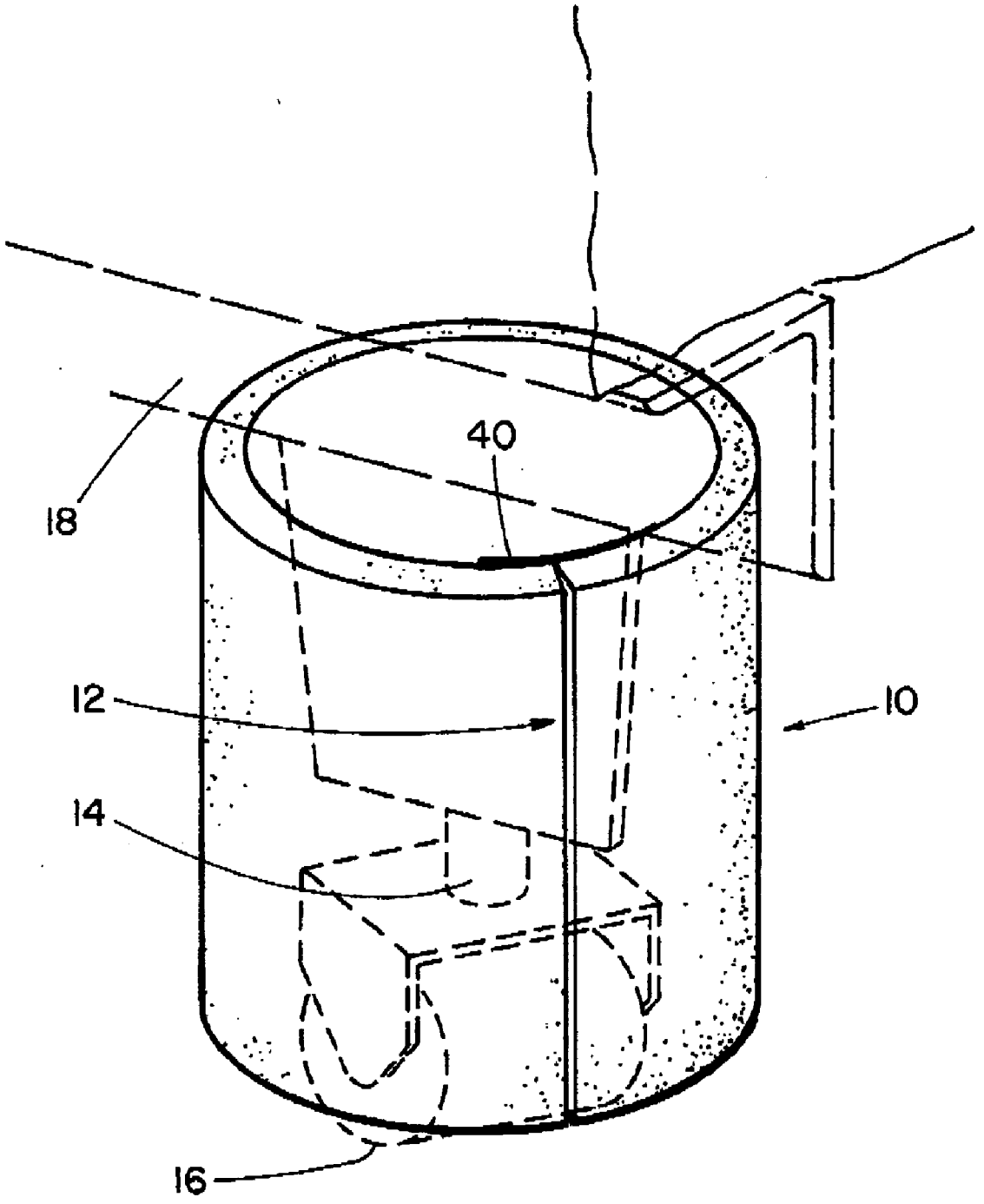


FIG. 1

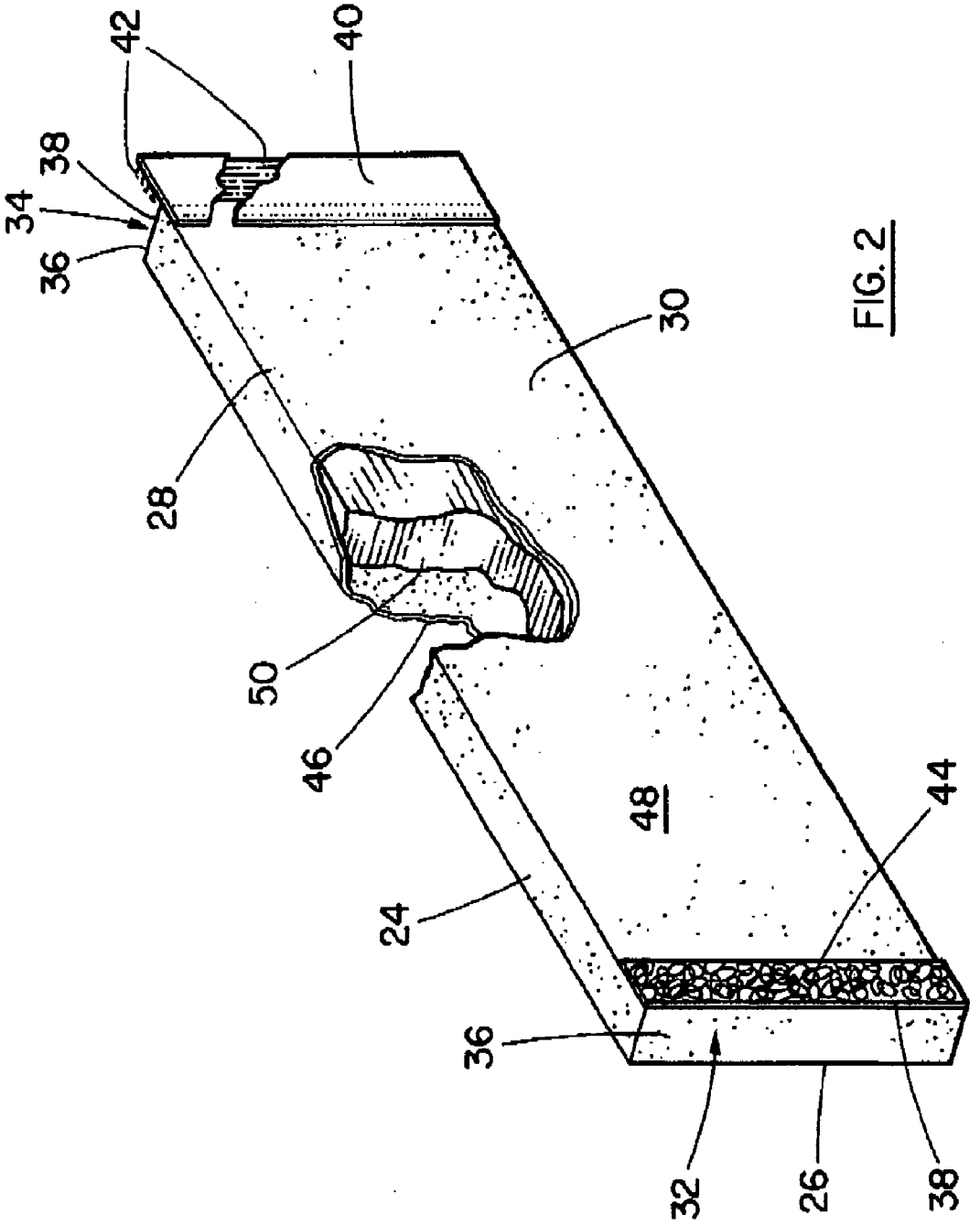


FIG. 2

FIG. 3

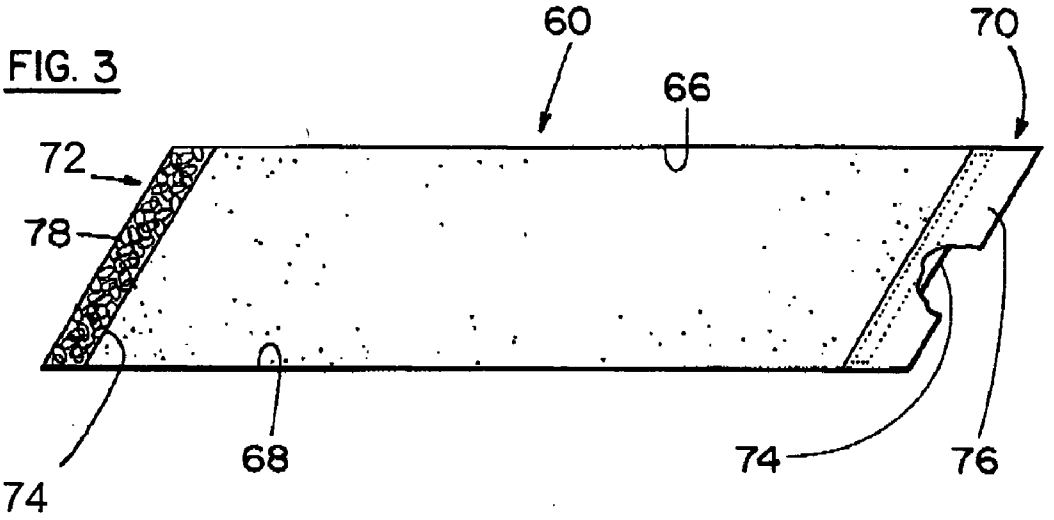
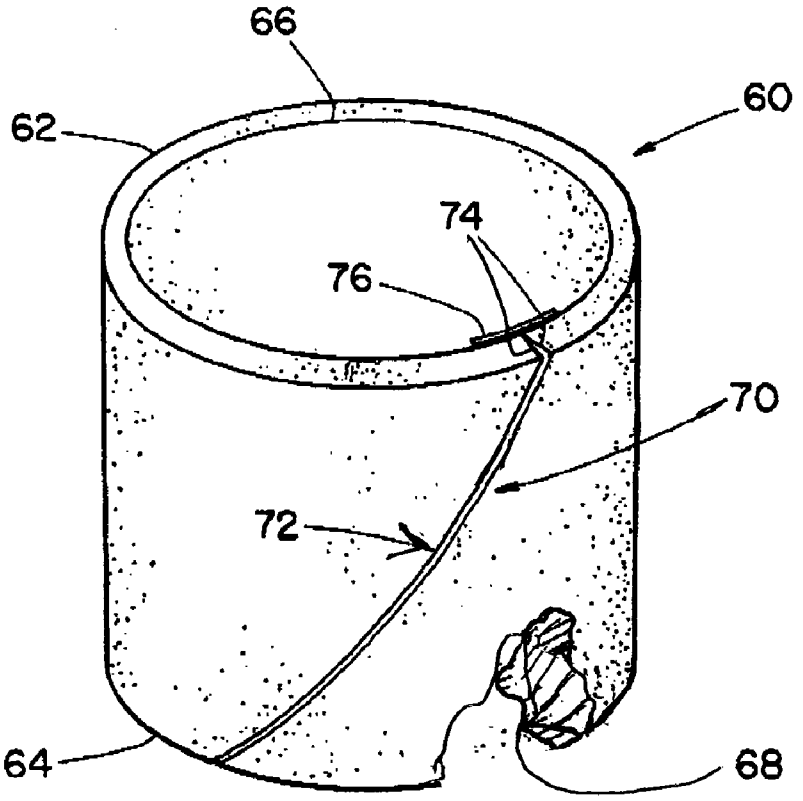


FIG. 4



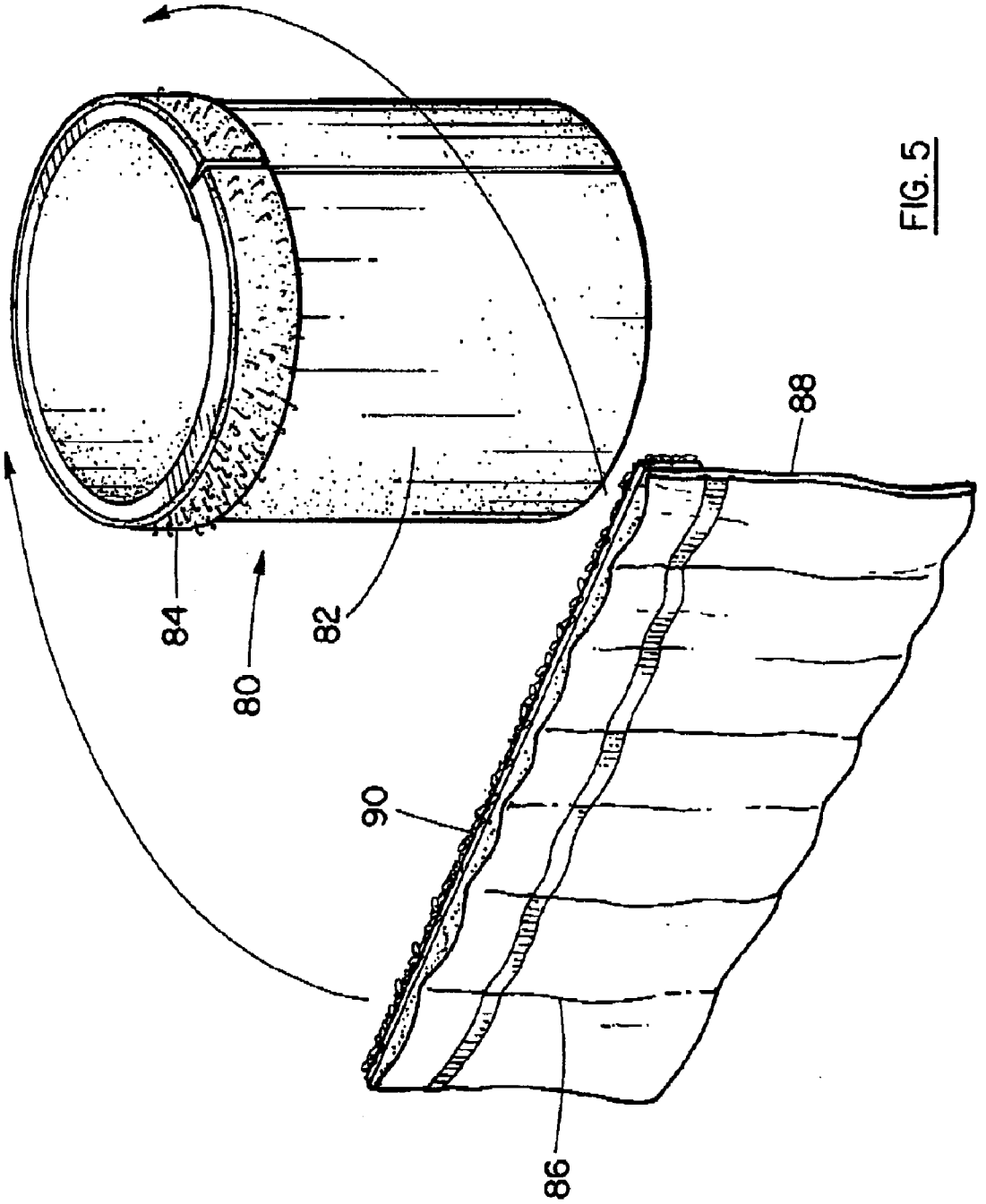


FIG. 5

BUMPER GUARD

FIELD OF THE INVENTION

[0001] The present invention relates to a bumper guard for furniture legs, posts and other such obstructions at or close to floor level. The bumper guard is in the form of a wrap around pad with overlapping fastenings which can be quickly attached and detached where required.

[0002] The bumper guard may be provided with a sleeve of designer fabric attached to the wrap around pad fastened by its own fastening means, for various decorative effects.

BACKGROUND OF THE APPLICATION

[0003] In households or in any other like environment where there are different types of furniture and where occupants are walking or moving particularly during the night or in unlighted circumstances, there is a risk for an occupant to hit or to bump the lower parts of the furniture especially when the person is barefoot or is inadequately protected or covered by shoes, slippers, sandals or the like.

[0004] Any occupant, adult or child, walking barefoot or in thin slippers may hit the legs or lower parts of the bed, a chair or a table.

[0005] The risk is higher during the night, especially in unexpected instances such as night phone calls, night visits to the bathroom or to the child's room, and even in emergency situations.

[0006] In such cases it is not uncommon for such an occupant to strike a toe or any part of the foot against a leg of a furniture piece, or other obstruction. A special offender which may cause a serious injury are the caster supports for bed or armchair or the like furniture.

[0007] Such a situation is not confined to household or bedroom areas.

[0008] Certain basements, offices, waiting halls, or the like places may well have support posts or beams, or furniture legs or casters offering hazards to feet and toes.

[0009] The need to protect inadequately shod feet with respect to furniture legs, equipment supports, bed casters and the like is well known.

[0010] There is also the need to protect the furniture legs from the shoes of a shod person. Accordingly it is desirable to provide adequate protection on furniture legs, casters, posts, and any other such hazards located on or near floor level all of which are collectively but not exclusively referred to herein as "obstructions" in many areas and to provide protection for supporting equipment, furniture legs, and the like from the feet of the occupants, in an efficient, simple, cheap, convenient and removable manner. U.S. Pat. No. 6,418,578 describes a molded protective guard for casters on furniture adapted for use with a bed frame. The guard fits over an existing leg of the bed frame. The guard has a specially shaped shell-like body with an opening in the upper surface to fit up along the leg of the bed. The shell-like guard fits over the caster assembly on the existing leg, thus holding the protective guard in position permanently affixed to the bed frame.

[0011] The protective guard has to be shaped in a shell-like configuration adapted to the leg and caster of the bed.

[0012] Such protective guards if made, would not have the capacity to be adapted to any kind of furniture piece, since they are structured specially for the casters from the bed legs. Attachment or removal of the protective guard would require lifting of the furniture.

[0013] The guard would have had to be slid down the length of the leg, and off the lower end, in order to remove it. Replacing it on another leg would require the same operation. The furniture would have had to be lifted up, to raise the leg off the floor. The guards would have had to be placed under the leg and slid up the leg, before the furniture could be lowered down.

[0014] Also, such a protective guard as proposed has a complicated configuration. It would not be a cheap solution and would not be easy to affix it or to remove in case there is a need to. It would not be suitable for heavy items of furniture, and would be useless for fixed obstructions such as posts and columns.

[0015] It is not known in fact whether such a complex protective guard was ever made or used.

[0016] There is a need for a bumper guard for any kind of furniture which is cheap, easily attached and removed, without disturbing the furniture, having both the function to protect the feet, and also to suit the design and decor of the environment where it is used, as well as to be reused any time the user needs.

BRIEF SUMMARY OF THE INVENTION

[0017] With a view to answering at least some of the foregoing problems, the invention provides a bumper guard for furniture supporting legs, casters, beams, posts and other like equipment, named herein "an obstruction".

[0018] The bumper guard is removable, flexible, resilient and of protective construction, having a wrap around pad extending around the obstruction with two layers of fabric and having a resilient core in between them, the two layers being affixed together and designed to wrap loosely around the obstruction, and fastened up by fastenings, such as buckles, tapes, straps and the like, and in particular a hook and pile fastening such as "Velcro" (Trademark), affixed to the ends of the wrap around pad. The bumper pad will thus cover the obstruction to provide protection against injury from unexpected moves or bumping of the obstruction by occupants walking or standing nearby.

[0019] The bumper guard can be designed in different ways imposed by the shape and size of the legs.

[0020] The bumper guard is openable for ready application to and removal from the obstructions to be protected, without moving of lifting the furniture. In some cases the obstructions can be enclosed indefinitely. In other situations, the bumper guard will be used only at specific times or short intervals.

[0021] Preferably the bumper guard is made from a material which is sufficiently strong, and resilient that the occupant 's toe in a barefoot encounter, simply does not push through the bumper guard, without protection, to the obstruction surrounded. On the other hand, it may be resilient enough to yield before the occupant's foot so contact with it will not itself injure the occupant's foot. A certain amount of warning and protection comes from the initial

contact with the bumper guard which is spaced circumferentially and loosely outwardly from the obstruction.

[0022] A backup amount of protection and warning comes from the impact of the bumper guard against the obstruction itself if the occupant's foot drives it there against.

[0023] The uniform character of the bumper guard, its substantially smooth surface and its yielding impact upon the obstruction all aid to protect the occupant's foot. By not being integral with or connected to the object it surrounds, other advantages are obtained. The invention is directed to an improved and simpler bumper guard for obstructions, especially furniture, for surrounding the feet of furniture pieces, equipment and legged structures in home, offices, commercial and the like areas where frequently there are occupants walking around in regular or unlighted conditions with insufficiently protected feet.

[0024] The bumper guard may have connections at the ends, in which a flap extends from the inside edge of the pad at one end and overlaps and overlies the inside edge of the pad at the other end.

[0025] The fastening is carried on the flap and the adjacent inside edge of the pad.

[0026] In addition there may be fastenings on the opposed end faces of the opposite ends of the pad. The pad may be attached to and detached from an obstruction as desired.

[0027] In another embodiment the bumper guard has oblique angled edges, to improve the protection and security.

[0028] In another embodiment the bumper guard may have a decorative cloth sleeve. The sleeve can be separate from the bumper guard and can be releaseably attached.

[0029] Other and further objects of the application will appear in the course of the following description thereof.

[0030] The various features of novelty which characterize the invention are pointed out with more particularity in the claims annexed to and forming a part of this disclosure.

[0031] For a better understanding of the invention, its operating advantages and specific objects attained by its use, reference should be had to the accompanying drawings and descriptive matter in which there are illustrated and described preferred embodiments of the invention.

IN THE DRAWINGS

[0032] **FIG. 1** is a perspective view of an obstruction with a first form of the bumper guard shown around the obstruction;

[0033] **FIG. 2** is a perspective view of the bumper guard showing the inner surface;

[0034] **FIG. 3** is an elevational view of a bumper guard in another embodiment of the invention which is in the form of a parallelogram;

[0035] **FIG. 4** is a perspective view of a bumper guard of **FIG. 3** showing the inclined junction; and,

[0036] **FIG. 5** is a perspective view of a bumper guard of a further embodiment of the invention.

DESCRIPTION OF A SPECIFIC EMBODIMENT

[0037] Referring to **FIG. 1 a** bumper guard or pad **(10)** In the form of a panel arranged into a generally tubular wrap around member with a join **(12)**, located around an obstruction, in this case a furniture leg **(14)** having a wheeled caster **(16)**.

[0038] The caster and leg in this embodiment are is connected in the usual manner to a frame **(18)** of a piece of furniture. It may be seen that an obstruction, such as in this case a typical depending leg construction offers numerous points which may be hit by a bare toe or a toe through a cloth slipper, etc. These include the support itself, any part of the caster, the wheel of the caster or the like, or any other obstruction at or near floor level. The bumper pad **(10)** comprises what is shown as a generally wrap-around panel forming what appears as a cylindrical tube. The pad **(10)** fits loosely around the obstruction, and rests on the floor. In this embodiment the pad **(10)** has a configuration of a panel with a rectangular elongate length **(FIG. 2)** with an elongate front upper edge **(24)** and front lower edge **(26)**, and a rear or inner upper edge **(28)** and rear or inner lower edge **(30)**. The front and rear edges define generally transverse length dimensions equal to one an other. The pad has vertical ends **(32)** **(34)** defined, at each end, by front and rear side edges **(36)** and **(38)**.

[0039] A fastening flap **(40)** provided attached to rear or inner side edge **(38)** at end **(34)**, and projects outwardly beyond the length of the panel. Fastening means **(42)** are affixed on the flap, on its outward facing surface.

[0040] The pad is provided at the rear or inner side edge **(36)** of the adjacent end **(32)** with complementary fastening means **(44)**, located in its inwardly facing surface. Such fastening means may be such as buckles, tapes, straps and the like and in a particular a hook and pile fastening such as "Velcro" (trade mark).

[0041] The fastening means **(42)** and **(44)** are positioned so as to permit fastening between the flap **(40)** and the rear or inner side edge **(36)** which results in a generally tubular wrap around pad as shown in **FIG. 1**.

[0042] The pad of **FIG. 2**, in this embodiment is preferably made of two fabric layers **(46)** and **(48)**, enclosing a resilient core **(50)**, particularly a core of urethane foam.

[0043] The outer face of the pad **(10)**, may have a nap of strong and resistant fabric, which may be more resilient and absorbent of shock into the occupant 's foot for protection.

[0044] **FIG. 1** shows the application of the bumper guard to an obstruction such as a piece of furniture such as bed leg **(14)**.

[0045] It is preferable to have a bumper guard which is not either integral with or connected with the obstruction to be surrounded. In this manner, the bumper guard can be positioned entirely free thereof and if struck by an occupant's toe or the like there will be no contacting the obstruction.

[0046] The bumper pad **(10)** can be wrapped around and attached to an obstruction without moving furniture. The pad can be moved from place to place as required.

[0047] This embodiment of bumper guard provides a supplementary warning.

[0048] The pad (10) contacts the obstruction before the toe of the occupant will strike same giving additional warning and additional protection. Conversely, a glancing or slight strike of the occupant 's toe, by both giving warning and limiting contact with the bumper guard. In addition the bumper guard offers greater protection to the obstruction. The fabric used for outer or inner surfaces may be conventional fabric, piece of carpet, foam rubber, foam plastic, leather, quilted cloth, or vinyl or the like for the outer and inner layers. The core of urethane may be replaced by any other suitable resilient cushioning material such as foam rubber, inflated plastic packaging material, natural materials such as kapok, cotton batting and the like.

[0049] The height may be subject to variations, in order to fit the kind, and size of the obstruction such as legged furniture.

[0050] **FIG. 3** and **FIG. 4** show another embodiment of the invention. The pad (60) is in the form of a panel in the shape of a parallelogram with an elongate front upper edge (62) and front lower edge (64), parallel to one another and a rear or inner upper edge (66) and a rear or inner lower edge (68). The front and rear edges define generally transverse length dimensions equal to one another. The pad (60) has inclined non-vertical and substantially parallel ends (70) and (72) defined by front and rear side edges (74). Ends (70), (72) lie on axes parallel to one another and non-right angular relative to upper and lower edges (62) (64).

[0051] Fastenings are provided as in the embodiment of **FIG. 1**. Flap (76) on rear edge (74) of end (72) overlaps fastening means (78) on end (70). The fastenings are again provided on the inner side of the two adjacent ends of the pad.

[0052] The adjacent ends of the pad are inclined in a non-vertical fashion parallel to each other. This permits closing the pad (60) in a generally cylindrical tubular shape. The inclined junction provides a longer angled closure giving a more resilient outer face. The diagonal junction line also provides a smoother encirclement of the obstruction, a more resistant wrapped around pad which reduces the risk to open the bumper guard accidentally.

[0053] In **FIG. 5** shows another embodiment bumper guard (80).

[0054] The guard illustrated is similar to the guard (10) of **FIG. 1**, in this case.

[0055] However it could equally well be the guard of **FIG. 4**. In this embodiment the outer face (82) of the bumper guard (80) is provided on its upper edge with a sleeve fastening strip (84) of a fastening system or material, for example a hook and pile fastening such as "Velcro" (trade mark). Other fasteners would also serve the purpose.

[0056] This fastening strip (84) allows a sleeve (86) of a designer fabric to be attached so as to wrap around the exterior of bumper guard (80). The sleeve (86) consists of a rectangular piece of fabric. On its inner face there is an attachment strip (88). The strip (88) can be attached to the fastening strip (84) on the guard (80). The sleeve (86) can be longer than the guard (80). The colour and design of the sleeve (86) can vary to suit the decor where the bumper guard is mounted.

[0057] Hems, borders and ruffles might be provided on the sleeve (86) to meet design or decorative objectives. The upper edge of the sleeve is preferably pleated or gathered so as to allow the lower edge to hang loosely around the guard (80). Thus it can be seen that the bumper pads or guards operate not only to protect the foot of the occupant, but also the obstruction encircled. The bumper guards are readily applied and removed by simply wrapping around the obstruction, without moving or lifting furniture They are simple, economical, and long lived and rugged.

[0058] The rectangular shape of the sleeve can be modified or changed to suit a variety of purposes.

[0059] From the foregoing, it will be seen that this invention is one well adapted to attain all of the ends and objects set forth together with other advantages.

[0060] It will be understood that certain features and subcombinations are of utility and may be employed without that certain features and subcombinations. This is contemplated by and is within the scope of the claims.

[0061] The foregoing is a description of a preferred embodiment of the invention which is given here by way of example only. The invention is not to be taken as limited to any of the specific features as described, but comprehends all such variations thereof as come within the scope of the appended claims.

What is claimed is:

1. A bumper guard for an obstruction, the guard being readily attachable to such an obstruction and removable therefrom, without moving or lifting the obstruction, and comprising:

a wrap around pad of a length sufficient to extend around the obstruction and formed of two layers of fabric, the fabric defining two ends of the pad, and outer and inner surfaces;

a resilient core in between the fabric layers, and

releasable fastening adjacent the two ends of the pad, on the inner faces of the fabric layer for releasably fastening the two ends of the pad together around an obstruction whereby to form a generally tubular wrap around pad.

2. A bumper guard as claimed in claim 1, in which said pad consists of front and rear or inner fabric layers of rectangular shape having elongate front upper and front lower edges and rear upper and rear lower edges, the said front and rear edges defining generally transverse length said pad having normally vertical ends and, side edges and a predetermined height.

3. A bumper guard as claimed in claim 1, wherein the resilient core between the layers is made from urethane foam material.

4. A bumper guard as claimed in claim 2, including a fastening flap on one end of said pad, said flap defining inner and outer surfaces, and said releasable fastening on said end of said pad being secured to the outwardly facing surface of said flap whereby to overlap and close the junction between said ends.

5. A bumper guard as claimed in claim 4, in which said fastening means at the other end of said pad are provided on

the inwardly directed one of said layers of fabric, and positioned to overly said flap when said pad is wrapped around an obstruction.

6. A bumper guard as claimed in claim 1, in which said pad is a parallelogram shape having upper and lower edges which are generally horizontal and parallel and having ends extending between said upper and lower edges which are inclined at a non-vertical angle, and are parallel to one another.

7. A bumper guard as claimed in claim 6, in which said pad has a resilient core between the layers made from urethane foam material.

8. A bumper guard as claimed in claim 6 in which said pad is provided with fastening arranged along axes parallel to said ends on each end of said pad whereby to close the junction between said ends.

9. The bumper guard as claimed in claim 1, including a fabric sleeve adapted to wrap around said pad, and wherein said pad is provided on its outer surface with a sleeve fastening to receive said fabric sleeve.

10. The bumper guard as claimed in claim 9, wherein said fabric sleeve is of rectangular shape and has elongate front upper and front lower edges and normally vertical ends.

11. The bumper guard as claimed in claim 9 wherein said sleeve is provided on its inner upper edge with sleeve attachment, to attach to said pad.

12. The bumper guard as claimed in claim 9 wherein said sleeve defines upper and lower edges, and including pleats formed therealong, whereby said lower edge is fuller than said upper edge and hangs loosely around said pad.

13. A bumper guard for an obstruction the guard being readily attachable to such an obstruction and removable therefrom, without moving or lifting the obstruction, and comprising:

a wrap around pad of a length sufficient to extend around the obstruction and formed of two layers of fabric, the fabric defining two ends;

a resilient core in between the fabric layers;

releasable fastening adjacent the two ends for releasably fastening the two ends of the pad together around an obstruction whereby to form a generally tubular wrap around pad;

a fabric sleeve dimensioned to wrap loosely around said pad;

sleeve fastening on the outer surface of said pad to receive said fabric sleeve; and,

sleeve attachment on said sleeve to attach to the said pad.

14. A bumper guard for an obstruction the guard being readily attachable to such an obstruction and removable therefrom, without moving or lifting the obstruction, and comprising:

a wrap around pad of a length sufficient to extend around the obstruction and formed of two layers of fabric, the fabric defining two ends, said pad being of quadrilateral shape and defining upper and lower generally horizontal edges and two ends, said ends being parallel to one another and aligned along axes which are non right angular relative to said upper and lower edges;

a resilient core in between the fabric layers;

releasable fastenings adjacent the two ends for releasably fastening the two ends of the pad together around an obstruction whereby to form a generally tubular wrap around pad;

a fabric sleeve dimensioned to wrap loosely around said pad;

sleeve fastening on the outer surface of said pad to receive said fabric sleeve; and,

sleeve attachment on said sleeve to attach to the said pad.

* * * * *